## **CLAIMS**

A media having rewritable surfaces, comprising:
an electronic storage media upon which data may be recorded;

a surface on the exterior of said storage media is adapted with a first electrode covering a portion of said surface;

electronic ink deposited over said electrode, allowing areas of electronic ink to be set to one of at least two optical states by a second electrode of a programming device, having pixel electrodes presenting voltages in relation to said first electrode, thereby printing a rewritable label on said media.

- A media as recited in claim 1, wherein said media has a form factor conforming to CD or DVD media formats.
- 3. A media as recited in claim 2, wherein a conductor connects from said first electrode to areas near the spindle hole or the periphery of the media allowing a programming device to make electrical with said first electrode to create voltage fields between said first and second electrodes for programming the electronic ink state.
- 4. A media as recited in claim 1, wherein a third electrode region is coupled over the top of said electronic ink and configured to setting or resetting large areas of the electronic ink in response to programming voltage coupled between said first and said third electrodes.

5. An apparatus for printing rewritable labels on the surface of a data storage media, comprising:

a base member configured for physically engaging the exterior of a data storage media with label regions containing electrically programmable ink;

at least one contact on said base member configured for making contact with a first electrode within the media;

an electrode array retained by said base member in close proximity to the surface of said electrically programmable ink;

a means for instilling relative motion between said electrode array and a media retained by said base, wherein said electrode array passes over areas of the electrically programmable ink whose optical state is to be set in printing a rewritable label on the media; and

a control circuit electrically coupled to said electrode array and said at least one contact for establishing electrical connection with said first electrode;

wherein said control circuit is configured to modulate the voltages between the first electrode and the elements of the electrode array in response to the relative motion between said electrode array and said media, for selectively writing a label on said media in response to label data received by said control circuit.

- 6. An apparatus as recited in claim 5, wherein said base member comprises a slide-out media receiving drawer.
- 7. An apparatus as recited in claim 5, wherein said base member comprises a media access device having a clam-shell media receiving mechanism.

- 8. An apparatus as recited in claim 5, wherein said base member comprises a hand-held labeling device that the user manually moves over the surface of the media.
- 9. An apparatus as recited in claim 5, further comprising means of user creation of label content that is to be printed on said media.